

ABSTRACT

A semiconductor device is disclosed that includes a nonvolatile memory cell having a memory transistor and a selection transistor, and a peripheral circuit transistor. The memory transistor includes a memory gate oxide film that is arranged on a semiconductor substrate, and a floating gate made of polysilicon that is arranged on the memory gate oxide film. The selection transistor is serially connected to the memory transistor and includes a selection gate oxide film that is arranged on the semiconductor substrate, and a selection gate made of polysilicon that is arranged on the selection gate oxide film. The peripheral circuit transistor includes a peripheral circuit gate oxide film that is arranged on the semiconductor substrate, and a peripheral circuit gate made of polysilicon that is arranged on the peripheral circuit gate oxide film. The memory gate oxide film is arranged to be thinner than the peripheral circuit gate oxide film.